

ImmiDem, Aim 2: test neuropsicologici cross-culturali e adattamento in italiano

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Ministero della Salute

GR-2021-12372081



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DEP/Lazio
Dipartimento di Epidemiologia
del Servizio Sanitario Regionale
Regione Lazio

Findings from the ImmiDem survey

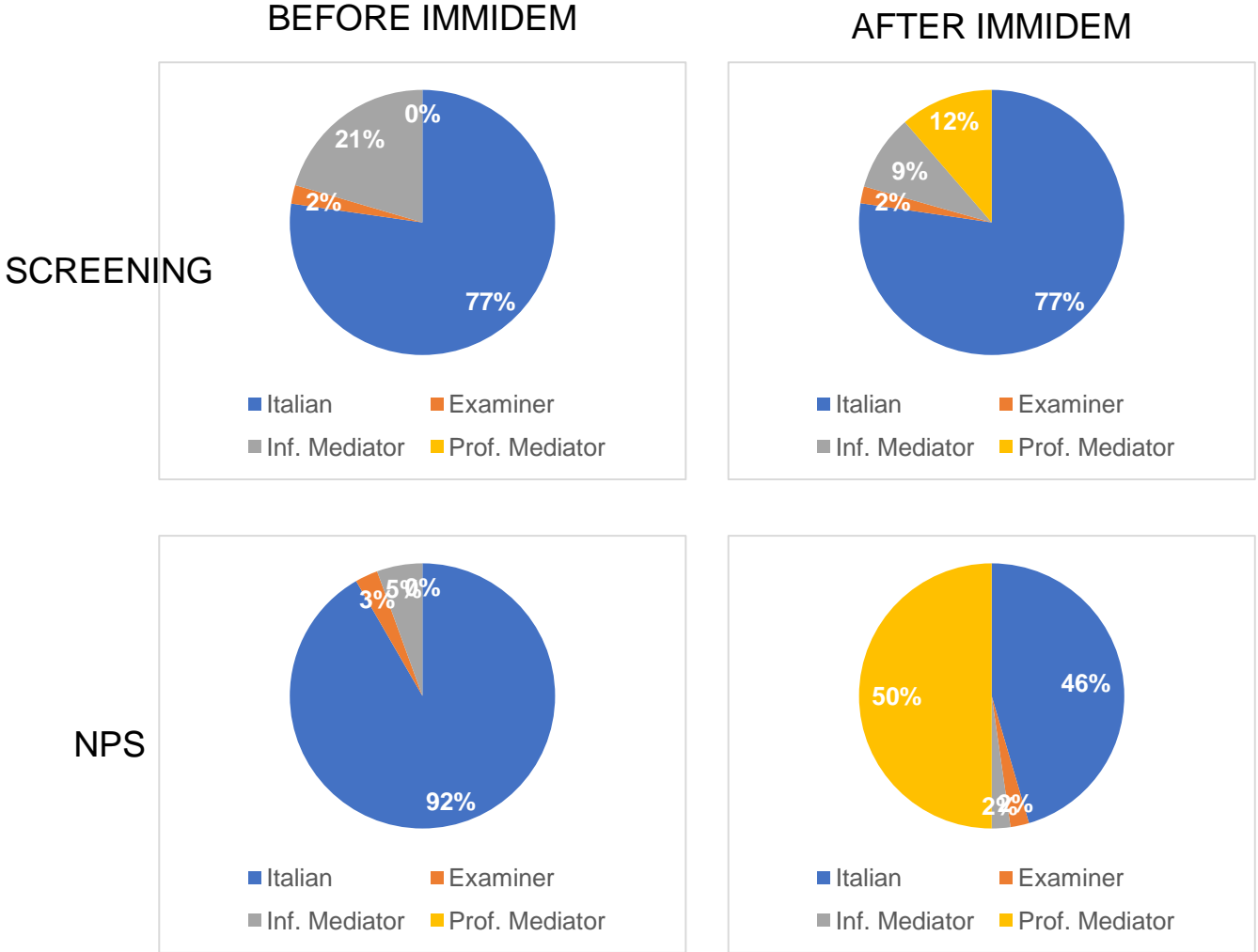
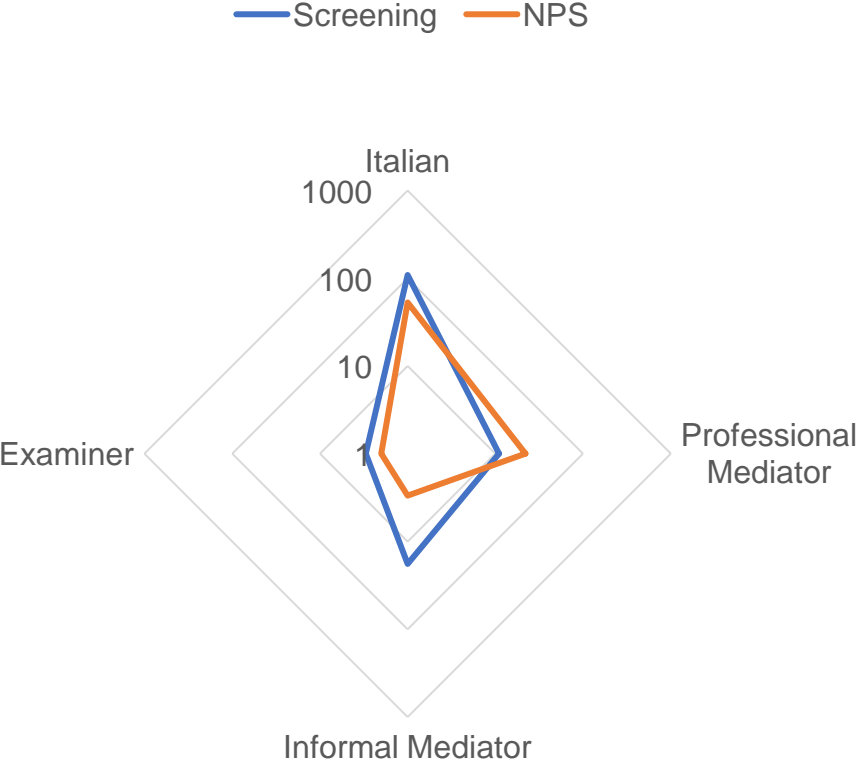
Migrants referred to the CCDD over the last 5 years

	Overall (n=343)	North (n=161)	Center (n=96)	South (n=86)	p
Stable	199 (58.0)	81 (50.3)	50 (52.1)	68 (79.1)	<0.001
Increased	130 (37.9)	74 (46.0)	44 (45.8)	12 (14.0)	
Decrease	14 (4.1)	6 (3.7)	2 (2.1)	6 (6.9)	



Neuropsychological assessment of migrants in their native language

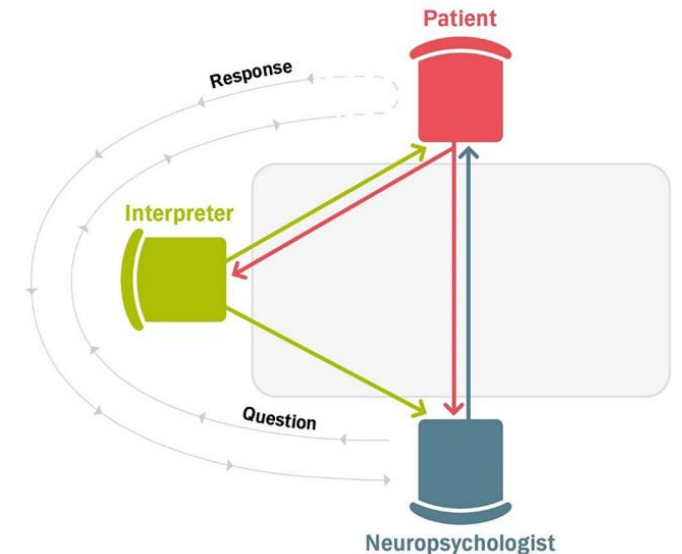
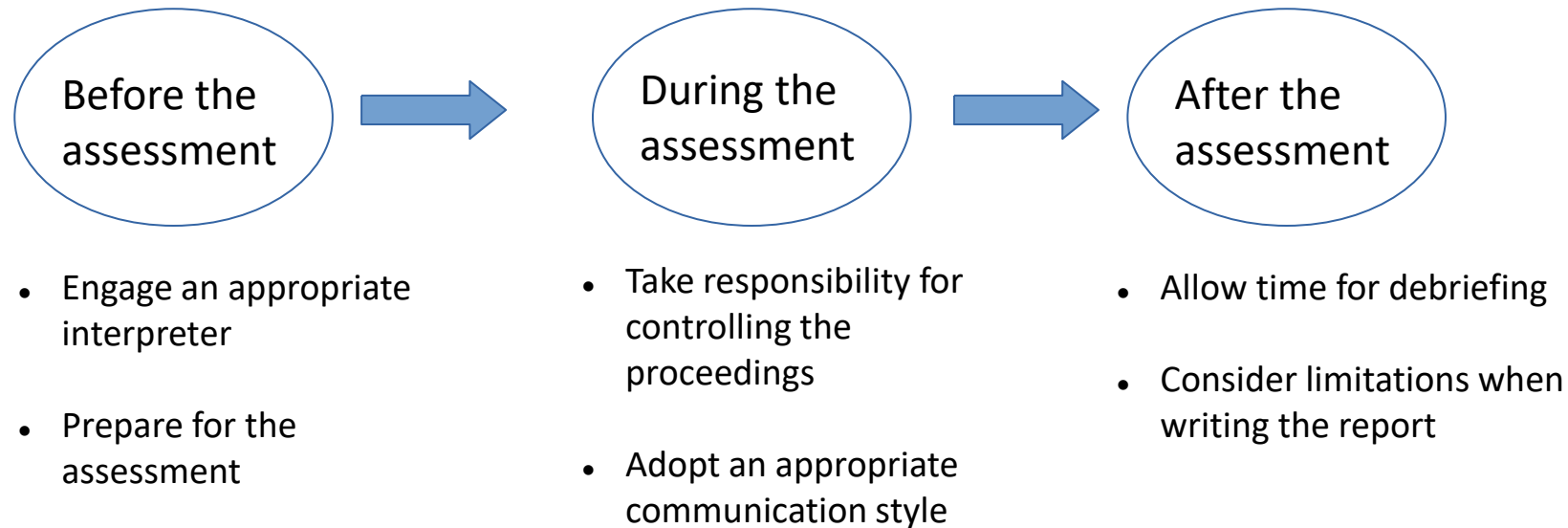
	Overall (n=343)	North (n=161)	Center (n=96)	South (n=86)	p
Availability of translated cognitive tests	38 (11.1)	20 (12.4)	8 (8.3)	10 (11.6)	0.59
Presence/availability of cultural mediators	128 (37.3)	82 (50.9)	34 (35.4)	12 (14.0)	<0.001
Presence/availability of interpreters	36 (10.5)	29 (18.0)	5 (5.2)	2 (2.3)	<0.001

Neuropsychological Assessment of migrant patients: Data from Sacco Hospital



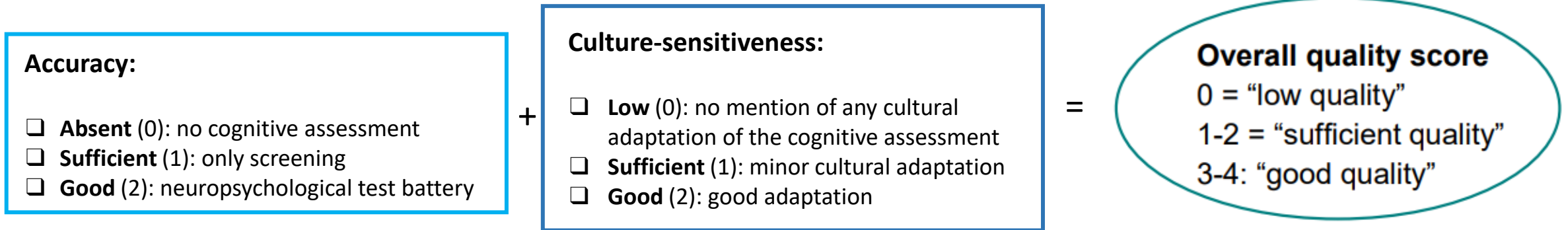
Interpreter-mediated neuropsychological assessment: Clinical considerations and recommendations from the European Consortium on Cross-Cultural Neuropsychology (ECCroN)

T. Rune Nielsen^{a,b} , Sanne Franzen^c , Tamlyn Watermeyer^{d,e}, Jessica Jiang^f,
Clara Calia^g, Daniel Kjærgaard^a, Søren Bothe^{b,h} and Naaheed Mukadam^{ij}
on behalf of the European Consortium on Cross-Cultural Neuropsychology
(ECCroN)



Findings from the ImmiDem survey

Overall quality of cognitive assessment of migrants, n(%)



	Overall (n=343)	North (n=161)	Center (n=96)	South (n=86)	p
Low	64 (18.7)	20 (12.4)	15 (15.6)	29 (33.7)	<0.001
Sufficient	234 (68.2)	113 (70.2)	67 (69.8)	54 (62.8)	
Good	45 (13.1)	28 (17.4)	14 (14.6)	3 (3.5)	



Ministero della Salute

Direzione generale della ricerca e dell'innovazione in sanità

BANDO RICERCA FINALIZZATA 2021
esercizio finanziario anni 2020-2021 - Progetto Completo

Project Title:

Dementia in migrants living in Italy: promoting a diversity-sensitive clinical approach and provision of care

Project duration (months): 36

Principal Investigator: CANEVELLI MARCO

Applicant Institution: Istituto Superiore di Sanita'

Project Code: GR-2021-12372081

Research Type: c) Change-promoting: valutare i fattori professionali, organizzativi e di sistema che condizionano efficacia ed efficienza dei servizi sanitari e/o l'impatto sulla qualità di innovazioni cliniche, organizzative, gestionali e di finanziamento; Sviluppo...

Project Type: Young Researcher (under 40 years)/Giovani Ricercatori (meno

ImmiDem, Aim 2

Specific Aim 2

To provide healthcare professionals with cross-cultural assessment tools for the cognitive evaluation of individuals with a migration background.

In the present project, we aim to translate into Italian and culturally adapt the following instruments that were proven useful and valid for the cross-cultural cognitive screening and neuropsychological assessment of multicultural populations:

- **The Rowland Universal Dementia Assessment Scale (RUDAS):** The RUDAS is a brief dementia screening test that was specifically designed for use in multicultural populations. It has six items that assess body orientation, praxis, drawing, judgment, memory, and language and takes approximately 10 minutes to administer. It has been validated in several cultures and languages, including monocultural and multicultural populations in both low- and high-income countries, showing excellent diagnostic properties (Int Psychogeriatr 2020;32:1031-1044).
- **The Multicultural Cognitive Examination (MCE):** The MCE is a cognitive test that incorporates the RUDAS and expands the assessment of memory, verbal fluency, and visuospatial functions. It can be administered in 25-30 minutes across different languages, cultures, and educational groups. It has been shown to improve diagnostic accuracy and classification in multicultural populations living in Western Europe (Int J Geriatr Psychiatry. 2019;34:982-989).
- **The European Cross-Cultural Neuropsychological Test Battery (CNTB):** the CNTB is a test battery that was specifically developed for cross-cultural neuropsychological examination. It can be administered in approximately 60 minutes by trained personnel and consists of 12 separate tests covering five cognitive domains (global cognitive function, memory, language, executive functions, and visuospatial functions). It has shown promising diagnostic properties in different ethnic populations living in Western Europe (Int J Geriatr Psychiatry. 2019;34:144-152).

The translation and cultural adaptation of the RUDAS, MCE, and CNTB will follow sequential steps including 1) forward translation, 2) back translation, and 3) cognitive debriefing in a pilot study, to ensure their reliability and validity (J Eval Clin Pract. 2011;17:268-74).


RUDAS

International Psychogeriatrics: page 1 of 14 © International Psychogeriatric Association 2020

doi:[10.1017/S1041610220000344](https://doi.org/10.1017/S1041610220000344)

REVIEW

Cross-cultural dementia screening using the Rowland Universal Dementia Assessment Scale: a systematic review and meta-analysis

T. R. Nielsen  and Kasper Jørgensen

Danish Dementia Research Centre, University of Copenhagen, Copenhagen, Denmark

Conclusions: The RUDAS has good diagnostic performance for detecting dementia in different sociocultural settings. Compared to other brief screening instruments, advantages of the RUDAS include its limited bias in people with limited or no formal education and a minimal need for cultural or language adaptation.

Step 1: FORWARD TRANSLATION

Two independent Italian native translators will perform the forward translation (one a professional uninformed translator without medical background and the other with medical background).



Step 2: SYNTHESIS

The two resulting versions will be compared by a third bilingual independent translator: a final forward-translated version will be obtained through a committee approach



Step 3: BACKWARD TRANSLATION

Two professional "uninformed" native English translators independently back-translated the synthesis test into English.



Step 4: CONSENSUS

The two back-translated versions will be compared with the original versions by a multidisciplinary committee including one methodologist, one healthcare professional experienced in cognitive assessment, and all four independent translators the developers of the instruments .



Step 5: COGNITIVE DEBRIEFING

The Italian versions of the tests will be tested for comprehensibility and clarity in pilot studies involving a sample of approximately 40 Italian cognitively healthy older adults, MCI and demented patients.



immidem



RUDAS

Home / Per gli operatori /Le scale per una valutazione cross-culturale /RUDAS

Rowland Universal Dementia Assessment Scale (RUDAS)

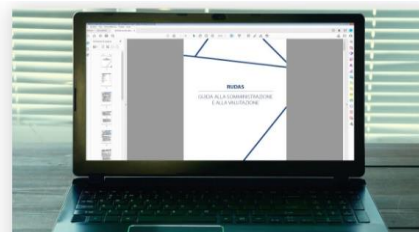
Nell'ambito dell'Immidem Study Group, il Centro per il Trattamento e lo Studio dei Disturbi Cognitivi dell'Ospedale Luigi Sacco sta lavorando alla selezione degli strumenti più idonei da utilizzare, ovvero meno influenzati dagli aspetti culturali (etnia, lingua, scolarità, alfabetizzazione), per l'inquadramento diagnostico dei migranti con disturbi cognitivi. La **Rowland Universal Dementia Assessment Scale (RUDAS)** è una sottoprova di screening contenuta all'interno della versione europea del Cross-Cultural Neuropsychological Test Battery (CNTB), volta a misurare il funzionamento cognitivo generale, ed **ha dimostrato di possedere alcuni vantaggi rispetto agli altri test** di screening cognitivo comunemente utilizzati, tra i quali la minore necessità di un adattamento linguistico e culturale e la inferiore variabilità di prestazione al test in presenza di differenti gradi di istruzione dei pazienti.

Il Centro per il Trattamento e lo Studio dei Disturbi Cognitivi dell'Ospedale Luigi Sacco ha quindi **tradotto e validato** la versione inglese della RUDAS sviluppata dal Danish Dementia Research Centre (DDRC) e l'ha resa disponibile in questa pagina per il **download in formato pdf** insieme alla Guida alla somministrazione e alla valutazione.



ROWLAND UNIVERSAL DEMENTIA
ASSESSMENT SCALE (RUDAS)

SCARICA IL PDF



GUIDA ALLA SOMMINISTRAZIONE DELLA
RUDAS

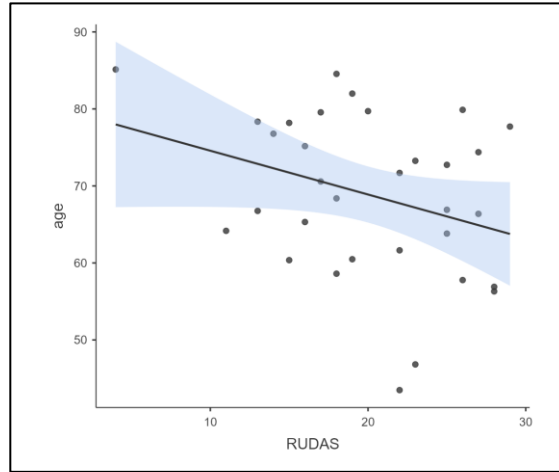
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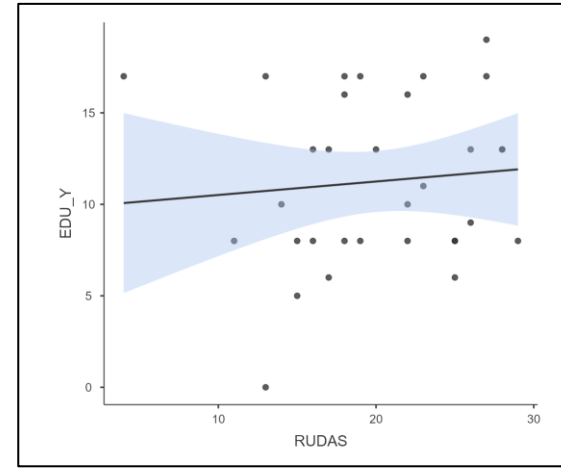
<https://immidem.it/per-gli-operatori/le-scale-per-una-valutazione-cross-culturale/rudas/>

RUDAS: preliminary data from Sacco Hospital

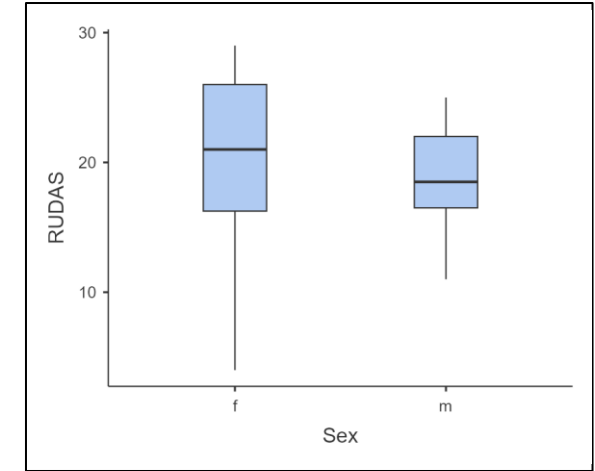
Correlations with demographic variables



Age

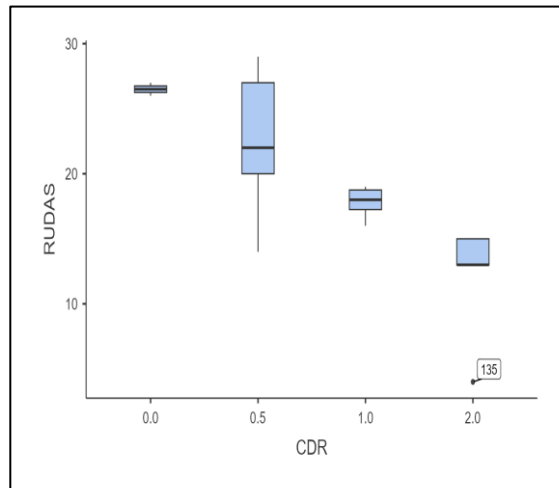


Education

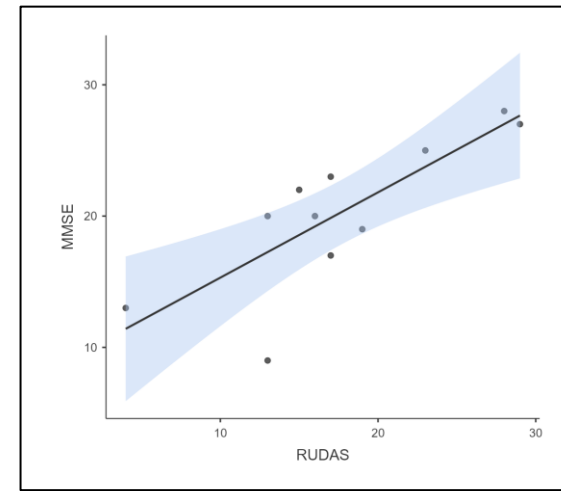


Sex

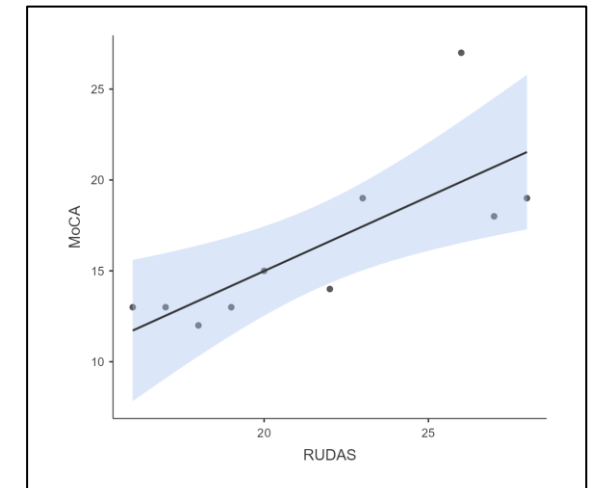
Correlations with screening tools:



CDR




MMSE



MoCA

RESEARCH ARTICLE

Validation of a European Cross-Cultural Neuropsychological Test Battery (CNTB) for evaluation of dementia

T. Rune Nielsen¹  | Kurt Segers² | Valérie Vanderaspolden² | Ulrike Beinhoff³ | Lennart Minthon⁴ | Anna Pissioti⁴ | Peter Bakkhus-Wetterberg⁵ | Guro Hanevold Bjørkløf⁶ | Magda Tsolaki⁷ | Mara Gkioka⁷ | Gunhild Waldemar¹

Conclusions: The CNTB was found to have promising cross-cultural diagnostic properties for evaluation of dementia in the targeted minority and majority populations and could represent a valid cross-cultural alternative to other well-established neuropsychological test batteries when assessing patients from these populations.

TABLE 1 Tests in the CNTB

Test	Description	Range of Scores
Global cognitive function		
Rowland Universal Dementia Assessment Scale (RUDAS) ¹⁰	Brief multicultural cognitive screening test containing six items that assess body orientation, praxis, drawing, judgment, memory, and language	0-30
Memory		
Recall of Pictures Test (RPT) ¹⁹	Learn and remember 10 colored pictures on three learning trials; the first trial consists of incidental recall of the pictures. Free recall and recognition of target pictures after a 10-min interference interval.	0-10
Enhanced Cued Recall (ECR) ²⁰	Sixteen colored pictures have to be recalled shortly after presentation, and a semantic cue is given for those pictures that are not freely recalled; the score is the total score of free and cued recall.	0-16
Recall of semi-complex figure ⁹	Copy of semi-complex figure and without forewarning recall it after a 3-min interference interval.	0-22

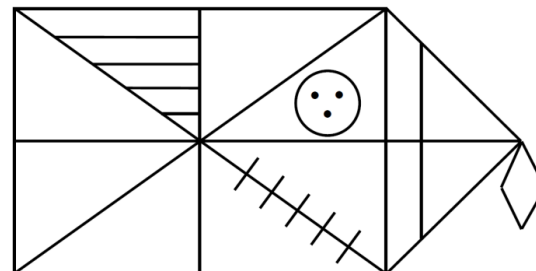
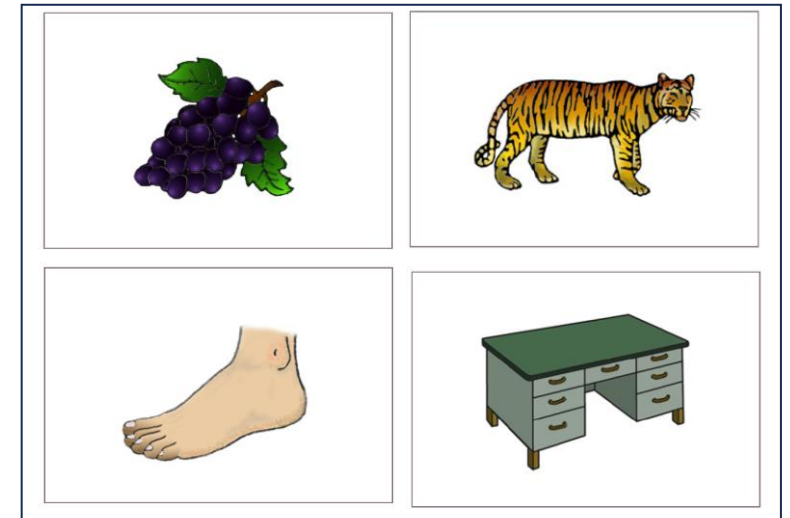


TABLE 1 Tests in the CNTB

Test	Description	Range of Scores
Language		
Picture naming ⁹	Naming of the 10 colored pictures in the first learning trial on the RPT.	0-10
Category verbal fluency ²¹	Consists of two components: Animals and supermarket items; 1 min for each.	Words produced
Executive functions		
Color Trails Test (CTT) ²²	Has two components: CTT 1 requires participants to connect numbered circles in ascending order; CTT 2 requires participants to switch between pink and yellow colors while connecting circles in an ascending sequence (ie, pink 1, yellow 2, pink 3, yellow 4, and so on).	Time in seconds
Five Digit Test (FDT) ²³	Has three components: FDT 1 requires participants to name a series of 50 digits; FDT 2 to count a series of 50 asterisks; FDT 3 to count a series of 50 digits in which the numeric value of the digits is incongruent with the number of digits.	Time in seconds
Serial threes ²⁴	Participants are required to count down from 20 by threes.	0-6

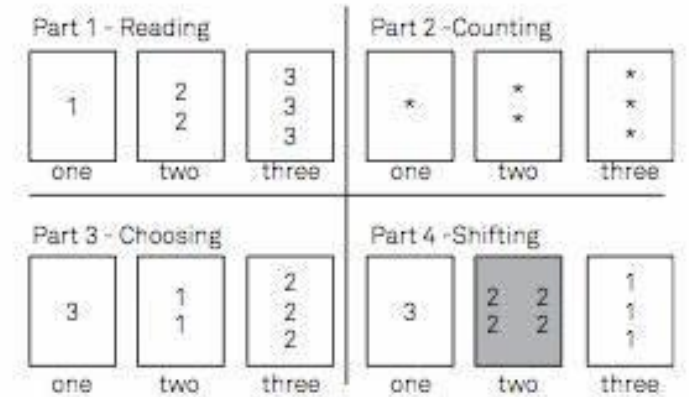
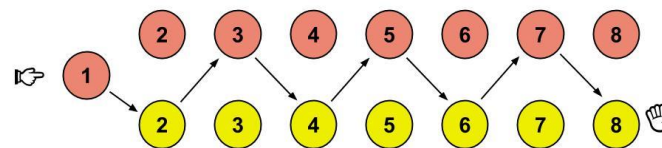
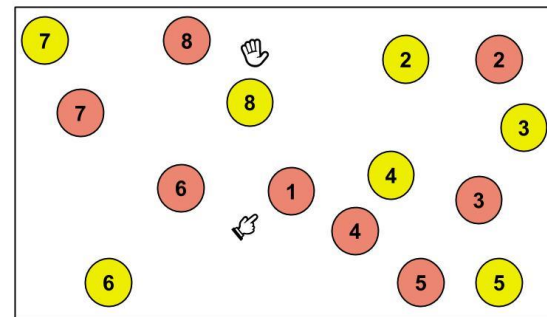


TABLE 1 Tests in the CNTB

Test	Description	Range of Scores
Visuospatial functions		
Copying of simple figures ²⁵	Copy of two simple figures; a Greek cross and a four-pointed star.	0-6
Copying of semi-complex figure ⁹	Copy of semi-complex figure; the figure used in recall of semi-complex figure.	0-22
Clock Drawing Test (CDT) ²⁶	Insert numbers and indicate the time 10 after 11 in a predrawn circle.	0-5
Clock Reading Test (CRT) ²⁷	Read the time on a series of 12 different clocks without numbers.	0-12

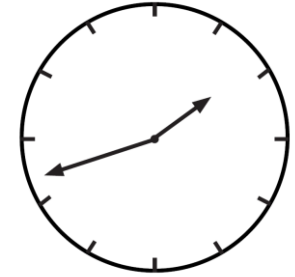
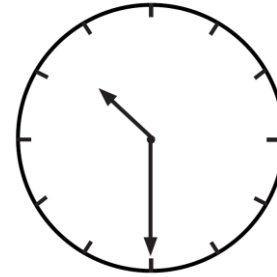
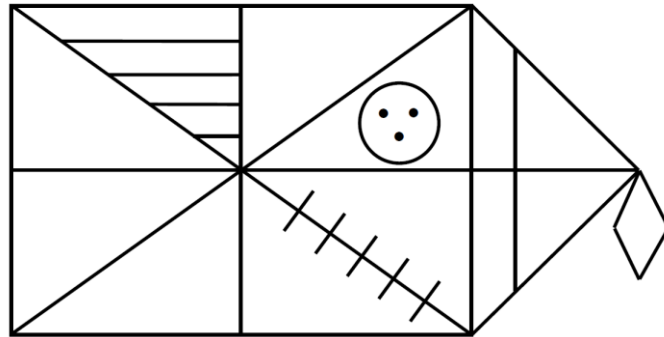
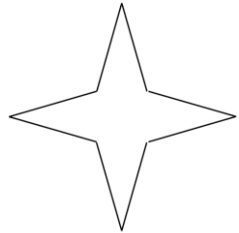
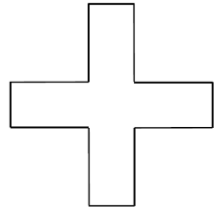
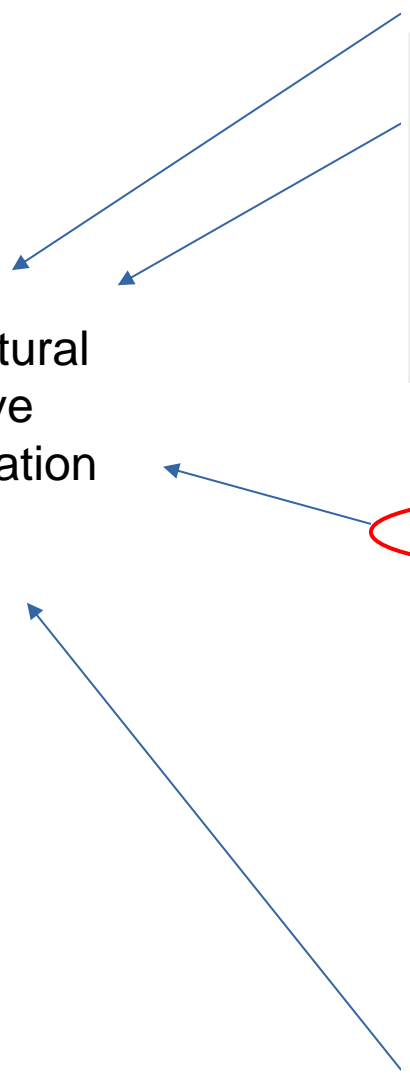


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Serial threes ²⁴	Participants are required to count down from 20 by threes.	0-6
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Clock Reading Test (CRT) ²⁷	Read the time on a series of 12 different clocks without numbers.	0-12

Multicultural Cognitive Examination (MCE)



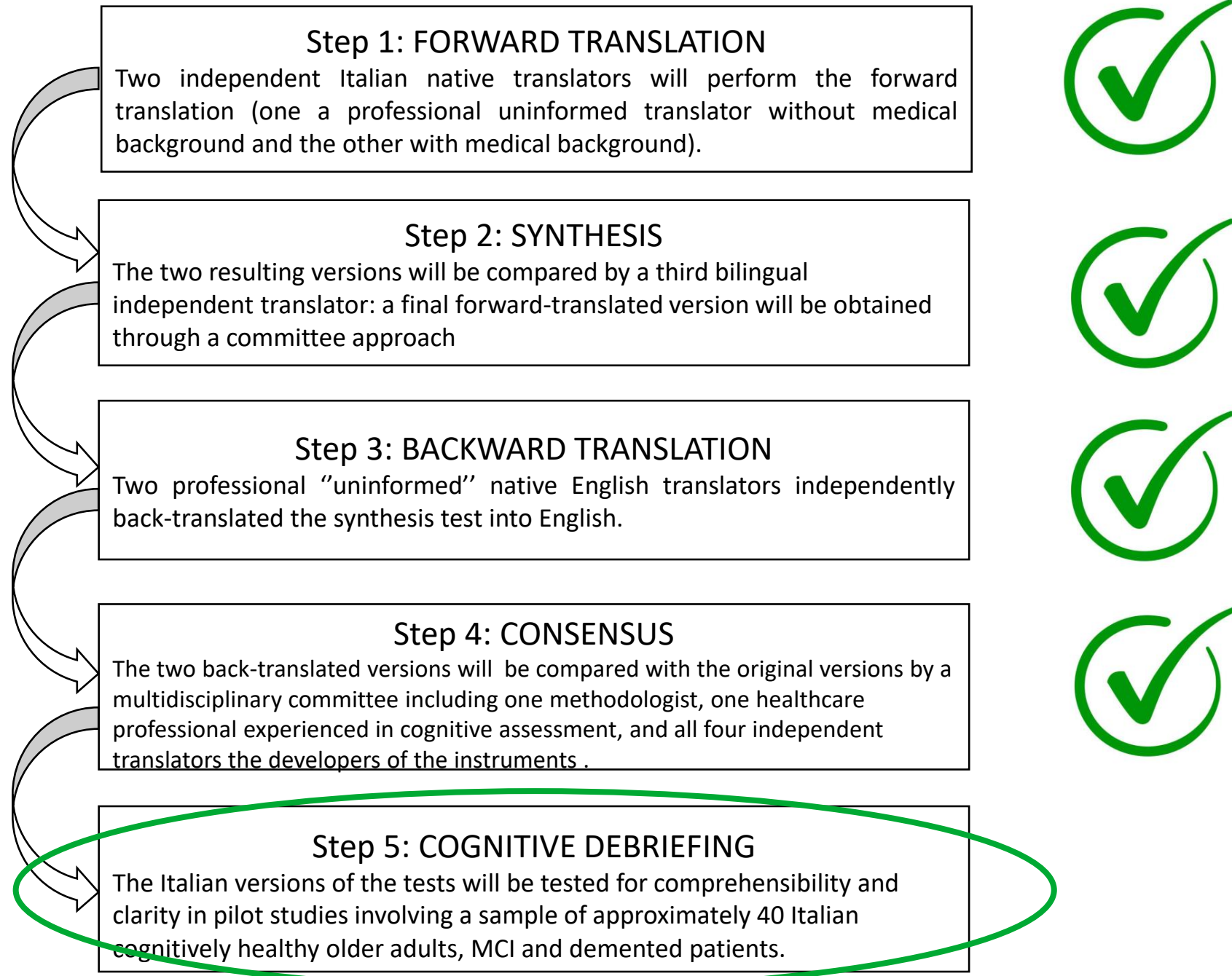
RESEARCH ARTICLE


Validation of a brief Multicultural Cognitive Examination (MCE) for evaluation of dementia

T. Rune Nielsen¹  | Kurt Segers² | Valérie Vanderaspolden² | Ulrike Beinhoff³ | Lennart Minthon⁴ | Anna Pissioti⁴ | Peter Bekkhus-Wetterberg⁵ | Guro Hanevold Bjørkløf⁶ | Magda Tsolaki⁷ | Mara Gkioka⁷ | Gunhild Waldemar¹

The MCE can be applied across several languages and cultures and across a broad educational range, including no formal education. The MCE components are easily administered both with and without the help of an interpreter and have been applied in more than 20 languages without need to change the content.

Conclusions: The MCE is a brief cross-cultural cognitive screening instrument that expands evaluation of the cognitive functions covered by the RUDAS, does not require any specialized training, and may be useful for classification of mild dementia or dementia subtypes.



 <p><i>Ministero della Salute</i> Direzione generale della ricerca e dell'innovazione in sanità BANDO RICERCA FINALIZZATA 2021 esercizio finanziario anni 2020-2021 - Progetto Completo</p>	Project Title: Dementia in migrants living in Italy: promoting a diversity-sensitive clinical approach and provision of care Project duration (months): 36
Project Code: GR-2021-12372081	Principal Investigator: CANEVELLI MARCO
Research Type: c) Change-promoting: valutare i fattori professionali, organizzativi e di sistema che condizionano efficacia ed efficienza dei servizi sanitari e/o l'impatto sulla qualità di innovazioni cliniche, organizzative, gestionali e di finanziamento; Sviluppo...	Applicant Institution: Istituto Superiore di Sanita'

3) **cognitive debriefing**: the Italian versions of the RUDAS, MCE, and CNTB will be tested for comprehensibility and clarity in pilot studies involving **a sample of approximately 40 Italian cognitively healthy older adults (both with low and high education) and patients diagnosed with MCI and dementia referred to Unit 2**. Participants will rate the instructions and items of the scale as clear or unclear. Instructions, response format, and items that are found to be unclear by at least 20% of the sample will be re-evaluated. The conceptual and content equivalence of the tools will be further determined by an expert panel. The diagnosis of dementia and mild cognitive impairment will be based on an extensive diagnostic workup, adopting the current international criteria.

No further psychometric testing of the Italian versions of the three tools is required since their psychometric properties have already been explored in culturally and linguistically diverse people (Int Psychogeriatr 2020;32:1031-1044; Int J Geriatr Psychiatry. 2019;34:982-989; Int J Geriatr Psychiatry. 2019;34:144-152).

Cognitive Debriefing with cultural mediators

How many?

Which Nations and Languages?

To Italy	n
From Romania	1.048.862
From Albania	486.187
From Morocco	451.960
From Ukraine	248.460
From China	233.338

<https://worldmigrationreport.iom.int/wmr-2022-interactive/>

Language	n	Language	n
Spanish	62	Bengali	2
Albanian	21	Chinese	2
Arabic	17	Dutch	2
French	12	Berber	1
German	12	Bulgarian	1
Romanian	10	Finnish	1
English	8	Georgian	1
Portuguese	8	Kurdish	1
Russian	8	Macedonian	1
Ukrainian	7	Moldavian	1
Tigrinya	7	Polish	1
Farsi	5	Punjabi	1
Tagalog	4	Quechua	1
Greek	3	Serbian	1
Sinhala	3	Urdu	1

CALD patients referring to the Sacco Hospital CCDD

GRAZIE DELL'ATTENZIONE

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Ministero della Salute

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